```
     (FILE 'HOME' ENTERED AT 10:31:19 ON 13 OCT 2006)

     FILE 'REGISTRY' ENTERED AT 10:32:16 ON 13 OCT 2006
L1           310 S PREDNISOLONE
L2            12 S PREDNISOLONE ACETATE
L3         29683 S CYCLODEXTRIN
L4          4274 S L3 AND GAMMA
L5            49 S L4 AND HYDROXYPROPYL
L6           438 S HYDROXYPROPYL (S) CYCLODEXTRIN
L7           438 S HYDROXYPROPYL (L) CYCLODEXTRIN
L8            13 S HYDROXYPROPYL GAMMA CYCLODEXTRIN
L9            12 S HYDROXYPROPYLMETHYLCELLULOSE
L10           86 S METHYLCELLULOSE
L11           16 S L10 AND HYDROXYPROPYL

     FILE 'CAPLUS, MEDLINE, BIOSIS, EMBASE' ENTERED AT 10:38:55 ON 13 OCT 2006
L12         3373 S 52-21-1/RN OR PREDNISOLONE ACETATE
L13           47 S L12 AND CYCLODEXTRIN
L14           38 DUP REM L13 (9 DUPLICATES REMOVED)
L15           38 FOCUS L14 1-

=>
```

L15 ANSWER 1 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1132902 CAPLUS
DOCUMENT NUMBER: 143:393094
TITLE: Prednisolone delivery to the back of the eye using **cyclodextrin**
INVENTOR(S): Lyons, Robert T.; Chang, Chin-Ming; Chang-Lin, Joan-En; Chang, James; Olejnik, Orest
PATENT ASSIGNEE(S): Allergan, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 18 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005234018	A1	20051020	US 2004-826843	20040415
WO 2005105067	A2	20051110	WO 2005-US11960	20050411
WO 2005105067	A3	20060427		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

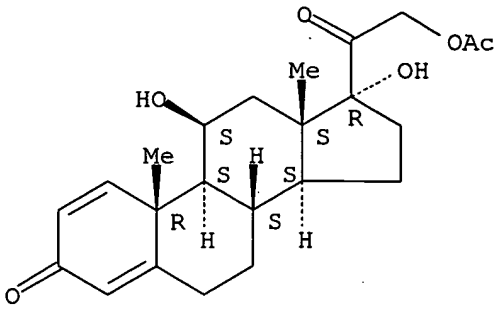
PRIORITY APPLN. INFO.: US 2004-826843 A 20040415

AB Disclosed herein are methods of delivering drugs or therapeutically active agents to the back of the eye via topical administration of compns. comprising **cyclodextrin** derivs. Compns. related thereto are also disclosed herein. Thus, an ophthalmic composition containing **prednisolone acetate** 0.4%, hydroxypropyl-β-**cyclodextrin** 10%, hydroxypropyl Me cellulose 0.5%, acetate buffer 0.08%, and disodium EDTA 0.01% showed improved bioavailability in aqueous humor of the rabbit eyes compared to control containing **prednisolone acetate** 1.0%, hydroxypropyl Me cellulose 0.12% and disodium EDTA 0.01%. Increasing the concentration of **prednisolone acetate** above 0.4% and the concentration of hydroxypropyl-β- **cyclodextrin** above 10% provided only minimal addnl. benefit.

IT **52-21-1, Prednisolone acetate**
RL: PKT (Pharmacokinetics); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prednisolone delivery to back of eye using **cyclodextrin**)

RN 52-21-1 CAPLUS
CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L15 ANSWER 2 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1223771 CAPLUS
DOCUMENT NUMBER: 143:466238
TITLE: Preserved pharmaceutical compositions comprising **cyclodextrins** and a cationic guanidine
INVENTOR(S): Chang, Chin-Ming; Chang, James; Lyons, Robert T.
PATENT ASSIGNEE(S): Allergan, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 8 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

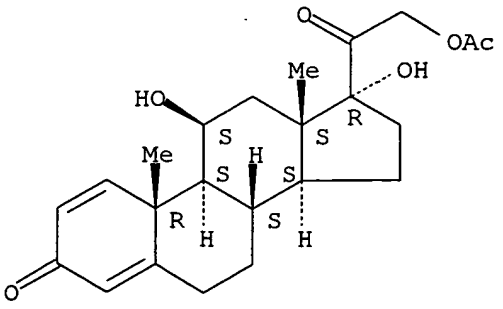
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005256083	A1	20051117	US 2004-844647	20040512
US 6969706	B1	20051129		
PRIORITY APPLN. INFO.:			US 2004-844647	20040512

AB A composition comprising a **cyclodextrin**, a guanidine-based cationic compound, and sorbic acid is disclosed. Compns. contained **prednisolone acetate**, hydroxypropyl γ-**cyclodextrin**, HPMC, AcOH/NaOAc, EDTA and water.

IT **52-21-1**, **Prednisolone acetate**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preserved pharmaceutical compns. comprising **cyclodextrins** and a cationic guanidine)

RN 52-21-1 CAPLUS
CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 3 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:633277 CAPLUS
DOCUMENT NUMBER: 141:145733
TITLE: Prednisolone compositions comprising **cyclodextrin**
INVENTOR(S): Chang, Chin-Ming; Chang, James N.; Luu, Michelle; Lyons, Robert T.; Olejnik, Orest
PATENT ASSIGNEE(S): Allergan, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 17 pp., Cont.-in-part of U.S. Pat. Appl. 2002 198,174.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004152664	A1	20040805	US 2004-764057	20040123
US 6358935	B1	20020319	US 1999-388968	19990902
US 2002076449	A1	20020620	US 2001-989295	20011120
US 6723353	B2	20040420		
US 2002198174	A1	20021226	US 2002-121076	20020412
EP 1702619	A2	20060920	EP 2006-6547	20020429
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
US 2004175435	A1	20040909	US 2004-800992	20040315
WO 2005072745	A2	20050811	WO 2005-US1582	20050120
WO 2005072745	A3	20060105		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, SM				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.:

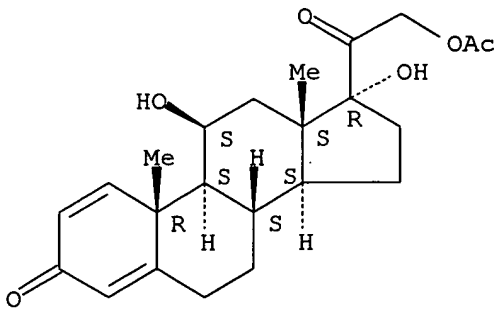
US 1998-98854P	P 19980902
US 1999-388968	A1 19990902
US 2001-289337P	P 20010507
US 2001-989295	A2 20011120
US 2002-121076	A2 20020412
EP 2002-769298	A3 20020429
US 2004-764057	A 20040123

AB Disclosed herein are compns. comprising **cyclodextrin** derivs. and prednisolone and prodrugs thereof, and methods related thereto. The use of soluble polyanionic polymers such as hydroxypropyl Me cellulose and others in relation to these compns. is also disclosed. Delivery of these prednisolone-related compds. to the back of the eye via topical ophthalmic administration is also disclosed. For example, an aqueous ophthalmic solution was prepared containing 1.4% **prednisolone acetate**, 30% hydroxypropyl-β- **cyclodextrin**, 0.5% HPMC, 0.08% acetate buffer (ph 6), and 0.01% disodium EDTA. When a single 35 μL dose was applied topically to the lower cul-de-sac of both eyes in white rabbits, an improved bioavailability (higher concentration of the drug in the aqueous humor) was observed compared to the control suspension containing no **cyclodextrin** derivative

IT **52-21-1, Prednisolone acetate**
RL: PKT (Pharmacokinetics); PRP (Properties); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)
(prednisolone ophthalmic solns. containing **cyclodextrin**)
RN 52-21-1 CAPLUS
CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)-
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



L15 ANSWER 4 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1994:541685 CAPLUS
DOCUMENT NUMBER: 121:141685
TITLE: **Cyclodextrin**- and polymer-based drug delivery system
INVENTOR(S): Tsao, Sheng Wan; Bowman, Lyle M.
PATENT ASSIGNEE(S): Insite Vision Inc, USA
SOURCE: PCT Int. Appl., 86 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9412217	A1	19940609	WO 1993-US11651	19931201
W: AT, AU, BB, BG, BR, BY, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, UZ, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5332582	A	19940726	US 1992-984445	19921202
AU 9456841	A1	19940622	AU 1994-56841	19931201
AU 672862	B2	19961017		
EP 674528	A1	19951004	EP 1994-902482	19931201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				

PRIORITY APPLN. INFO.:

US 1992-984445	A	19921202
US 1993-155167	A	19931119
US 1990-537062	A3	19900612
US 1992-838875	B1	19920219
US 1992-933574	A2	19920824
WO 1993-US11651	W	19931201

OTHER SOURCE(S): MARPAT 121:141685
AB Pharmaceuticals, especially, ophthalmic compns. containing a drug, e.g., steroids, a peptide or a protein, an effective stabilizing amount of carboxy polymer and a **cyclodextrin** such as β- **cyclodextrin**, or its derivs., in an aqueous medium, are described. Poorly water-soluble drugs can be solubilized by using these additives. Thus, the aminosteroid U-74006F

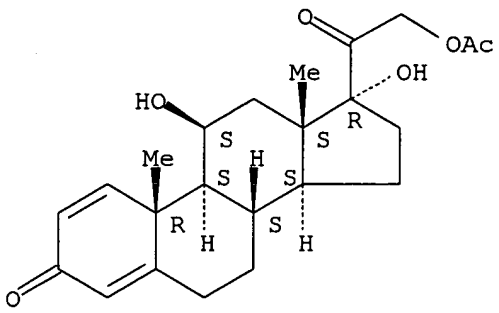
1.0, Polycarbophil 976 (Noveon AA-1) 1.0, 2-hydroxypropyl-β-**cyclodextrin** 20.0, EDTA 0.1, 0.2 NHCl 12.5, and water to 100.0%, and 2N NaOH to adjust the pH value were mixed and sealed under nitrogen and the resulting composition is useful for topical treatment of ophthalmic conditions.

IT **52-21-1, Prednisolone acetate**
RL: BIOL (Biological study)
(ophthalmic delivery systems containing polymers and **cyclodextrins** and)

RN 52-21-1 CAPLUS

CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L15 ANSWER 5 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:868748 CAPLUS
DOCUMENT NUMBER: 137:358163
TITLE: Disinfecting and solubilizing steroid compositions
INVENTOR(S): Lyons, Robert T.
PATENT ASSIGNEE(S): Allergan, Inc., USA
SOURCE: PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002089815	A2	20021114	WO 2002-US13701	20020429
WO 2002089815	A3	20030220		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2446528	AA	20021114	CA 2002-2446528	20020429
EP 1385528	A2	20040204	EP 2002-769298	20020429
EP 1385528	B1	20060823		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004529167	T2	20040924	JP 2002-586950	20020429
AT 337010	E	20060915	AT 2002-769298	20020429
EP 1702619	A2	20060920	EP 2006-6547	20020429

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR

PRIORITY APPLN. INFO.: US 2001-289337P P 20010507
EP 2002-769298 A3 20020429
WO 2002-US13701 W 20020429

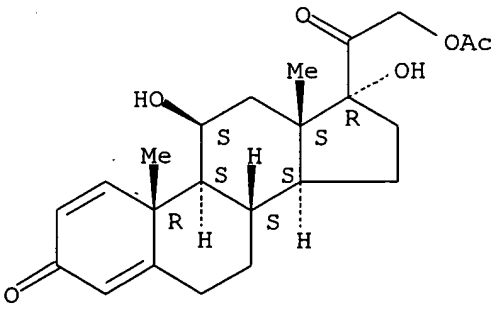
AB An aqueous ophthalmic composition comprising a lipophilic drug, e.g., a steroid, a cationic buffer, **cyclodextrin** or a **cyclodextrin** derivative, and optionally a water-soluble polymer is described. For example, to optimize a **cyclodextrin**-based formulation for the ocular administration of soluble **prednisolone acetate** (PA), the complexation of five β- **cyclodextrin** (CD) derivs. with PA was evaluated, both with and without added cellulose polymer (HPMC). The β- **cyclodextrins** were: methyl-O-**cyclodextrin**, hydroxypropyl-CD and sulfobutyl-CD, with the latter being substituted by an average of either 12, 7, or 4 groups per mol. In every case, an equimolar concentration of PA was added to 10% solns. of CD in dilute (20 mM) aqueous buffer prior to complex formation. The formulations were as follows **cyclodextrin** 10.0 g, HPMC 0.5 g, **prednisolone acetate** 0.5 g, boric acid 0.6 g, Na borate 0.035 g, Purite 0.005 g, HCl adjust to pH 7, and water to 100 mL. Among tested β-CD derivs., methyl-CD was by far the most efficient solubilizer. Although only 40% as effective, hydroxypropyl-CD had a superior toxicity profile. Affinity of sulfobutyl ether CD for PA increased as degree of substitution was reduced (12, 7, 4), but was never as high as HP-CD. During autoclaving, complexation was enhanced by about 70% (to 4.6 mg/mL) in the presence of 0.1% HPMC, but not by other tested polymers. Autoclave stress allowed quick screening for buffer catalysis of PA hydrolysis. It was found that phosphate salts accelerated hydrolysis by about 16-fold compared to acetate buffer or no-buffer control.

IT **52-21-1, Prednisolone acetate**
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(disinfection, stabilization and solubilization of steroid ophthalmic solns.)

RN 52-21-1 CAPLUS

CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L15 ANSWER 6 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:161175 CAPLUS

DOCUMENT NUMBER: 132:212707

TITLE: **Cyclodextrin**-containing compositions containing preservatives

INVENTOR(S): Beck, Gary J.; Kerslake, Edward D. S.; Olejnik, Orest
PATENT ASSIGNEE(S): Allergan Sales, Inc., USA
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

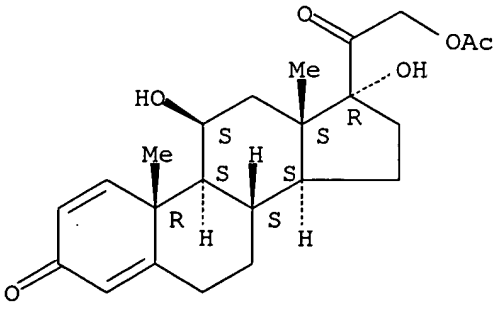
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000012137	A1	20000309	WO 1999-US20060	19990901
W: AU, CA, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2342797	AA	20000309	CA 1999-2342797	19990901
AU 9957025	A1	20000321	AU 1999-57025	19990901
AU 757896	B2	20030313		
EP 1109581	A1	20010627	EP 1999-944050	19990901
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002523475	T2	20020730	JP 2000-567247	19990901
PRIORITY APPLN. INFO.:			US 1998-98854P P	19980902
			WO 1999-US20060 W	19990901

AB Compns. including a liquid medium, a **cyclodextrin** component and a preservative component which has a reduced tendency to being complexed with the **cyclodextrin** component. In one embodiment, the preservative component is a chlorite component. Active (drugs) components are included in the compns. Thus, NaCl 0.622, KCl 0.14, CaCl2.2H2O 0.02, MgCl2.6H2O 0..06, CM-cellulose sodium salt 0.5, boric acid 0.2, sodium borate decahydrate 0.14, brimodine tartrate 0.2, β-**cyclodextrin** sulfobutyl ether 1 and water to 100%, stabilized ClO2 50 ppm. The presence of a **cyclodextrin** component does not have any detrimental effect on the preservative efficacy of stabilized chlorine dioxide. The stabilized chlorine dioxide remains free and effective as a preservative rather than being complexed by thecyclodextrin component. The composition is ophthalmically acceptable.

IT **52-21-1, Prednisolone acetate**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**cyclodextrin**-containing compns. containing preservatives)

RN 52-21-1 CAPLUS
CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 7 OF 38 CAPLUS

ACCESSION NUMBER: 1983:458904 CAPLUS
DOCUMENT NUMBER: 99:58904
TITLE: Water-soluble β- **cyclodextrin** complexes with steroids
INVENTOR(S): Lipari, John M.
PATENT ASSIGNEE(S): USA
SOURCE: U.S., 5 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4383992	A	19830517	US 1982-346501	19820208
PRIORITY APPLN. INFO.:			US 1982-346501	19820208

AB β- **Cyclodextrin** (I) forms water-soluble complexes with steroids having a mol. structure smaller than the interior cavity in the mol. structure of I. The resulting complexes can be used for a variety of applications including aqueous topical ophthalmic formulations. Thus, 5000 mg hydropropyl Me cellulose (II) was mixed with 1 L distilled H2O to form a 0.5% solution II. Twenty g I was added to this solution to give a saturated solution **Prednisolone acetate** (120 mg) was dispersed in 90 mL of this saturated solution As I-**prednisolone acetate** [86503-08-4] is formed it goes into solution Sufficient distilled H2O was then added to bring the final volume to 100 mL and produce a topical solution containing 0.12% **prednisolone acetate** for treatment of ocular inflammation.

L15 ANSWER 8 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:905608 CAPLUS
DOCUMENT NUMBER: 141:384304
TITLE: Preserved pharmaceutical compositions comprising **cyclodextrins**
INVENTOR(S): Lyons, Robert T.; Chang, James; Chang, Chin-Ming
PATENT ASSIGNEE(S): Allergan, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 7 pp., Cont.-in-part of U.S. Ser. No. 121,076.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004214797	A1	20041028	US 2004-845671	20040513
US 2002198174	A1	20021226	US 2002-121076	20020412
EP 1702619	A2	20060920	EP 2006-6547	20020429
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
WO 2005112883	A1	20051201	WO 2005-US14612	20050426
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,				

AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 2001-289337P	P	20010507
US 2002-121076	A2	20020412
EP 2002-769298	A3	20020429
US 2004-845671	A	20040513

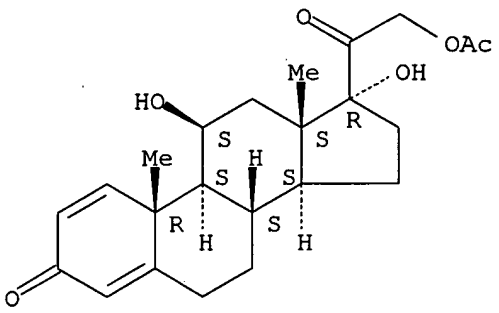
AB A composition comprising a steroid, a **cyclodextrin**, and a polyhexamethylene biguanide is disclosed herein. Preservatives and methods related thereto, and exptl. results suggesting certain advantages related to these compns., preservatives, and methods are also presented herein. Thus, a formulation contained polyhexamethylene biguanide 2 ppm, boric acid 0.6, glycerol 0.5, **prednisolone acetate** 1.2, Cavasol W 8HP 25, and EDTA 0.1% in water.

IT **52-21-1, Prednisolone acetate**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preserved pharmaceutical compns. comprising **cyclodextrins**)

RN 52-21-1 CAPLUS

CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L15 ANSWER 9 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:153177 CAPLUS

DOCUMENT NUMBER: 130:342880

TITLE: The effect of 2-hydroxypropyl-β-**cyclodextrin** on in vitro drug release of steroids from suppository bases

AUTHOR(S): Usayapant, Arunya; Iyer, Bragadeesh R.

CORPORATE SOURCE: Department of Pharmaceutical Sciences, Chicago College of Pharmacy, Midwestern University, Downers Grove, IL, 60515, USA

SOURCE: Drug Development and Industrial Pharmacy (1999), 25(3), 387-390
CODEN: DDIPD8; ISSN: 0363-9045

PUBLISHER: Marcel Dekker, Inc.

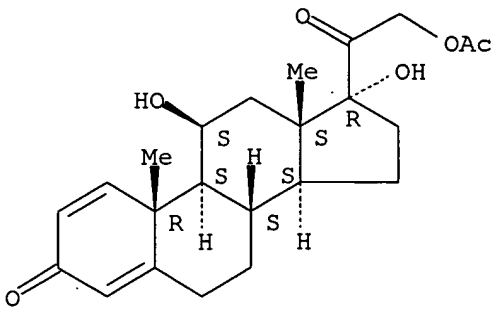
DOCUMENT TYPE: Journal

LANGUAGE: English

AB The effects of 2-hydroxypropyl-β- **cyclodextrin** (HPCD) on drug solubility and drug release from suppository bases were studied for dexamethasone (DX), dexamethasone acetate (DXA), hydrocortisone (HC), hydrocortisone acetate (HCA), and **prednisolone acetate** (PNA). It was found that HPCD significantly increased the aqueous solubility of all five steroids, and the increased drug solubility significantly influenced the drug release from the polyethylene glycol (PEG) base but not from the cocoa butter base.

IT **52-21-1, Prednisolone acetate**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effect of hydroxypropyl **cyclodextrin** on in vitro drug release of steroids from suppository bases)
RN 52-21-1 CAPLUS
CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

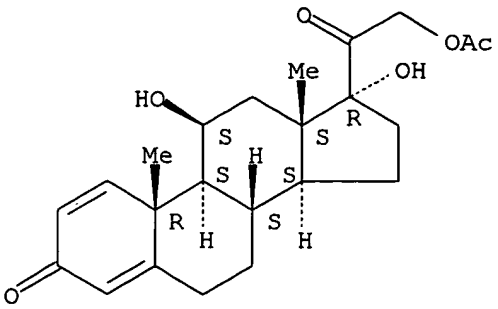
Absolute stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 10 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:425059 CAPLUS
DOCUMENT NUMBER: 131:248107
TITLE: Interaction of some steroid drugs with β-**cyclodextrin** polymer
AUTHOR(S): Forgacs, Esther; Cserhati, Tibor
CORPORATE SOURCE: Chemical Research Center, Institute of Chemistry, Hungarian Academy of Sciences, Budapest, H-1525, Hung.
SOURCE: Journal of Chromatography, A (1999), 845(1 + 2), 447-453
CODEN: JCRAEY; ISSN: 0021-9673
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The interaction of 15 steroidal drugs with a water-soluble β-**cyclodextrin** polymer was studied by reversed-phase TLC in the absence and in the presence of 0.1 M sodium chloride. The relative strength of interaction was calculated and the relationship between the hydrophobicity parameters of the drugs and the strength of the drug-β- **cyclodextrin** polymer was elucidated by principal component anal. Drugs readily formed inclusion complexes with the **cyclodextrin** derivs.; the strength of the interaction was higher in the presence of sodium chloride. It was assumed that the formation of inclusion complexes may influence the behavior of the drugs resulting in modified biol. efficacy.
IT **52-21-1**
RL: PRP (Properties); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(interaction of some steroid drugs with β- **cyclodextrin** polymer)
RN 52-21-1 CAPLUS
CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

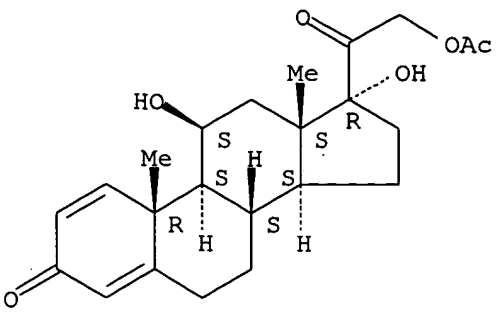
L15 ANSWER 11 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:286632 CAPLUS
DOCUMENT NUMBER: 133:140013
TITLE: Predicting the free energies of complexation between **cyclodextrins** and guest molecules: linear versus nonlinear models
AUTHOR(S): Klein, Christian Th.; Polheim, Diether; Viernstein, Helmut; Wolschann, Peter
CORPORATE SOURCE: Institut fur Theoretische Chemie und Molekulare Strukturbiologie, Vienna, A-1090, Austria
SOURCE: Pharmaceutical Research (2000), 17(3), 358-365
CODEN: PHREEB; ISSN: 0724-8741
PUBLISHER: Kluwer Academic/Plenum Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English

AB In the present paper, linear and nonlinear models for complexation of α-, β-, and γ- **cyclodextrin** with guest mols. are developed, with the aim of free energy prediction and interpretation of the association process. Linear and nonlinear regression is used to correlate exptl. free energies of complexation with calculated mol. descriptors. Mol. modeling supports the interpretation of the results. Highly predictive models are obtained, although the structural variability of the compds. used for their deduction is large, reaching from synthetic heterocycles to steroids and prostaglandins. The scaled regression coeffs. give insight to the complexation mechanisms, which appear to be different for the three types of **cyclodextrins**.

IT **52-21-1, Prednisolone acetate**
RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(linear vs. nonlinear models for predicting free energies of complexation between **cyclodextrins** and guest mols.)

RN 52-21-1 CAPLUS
CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

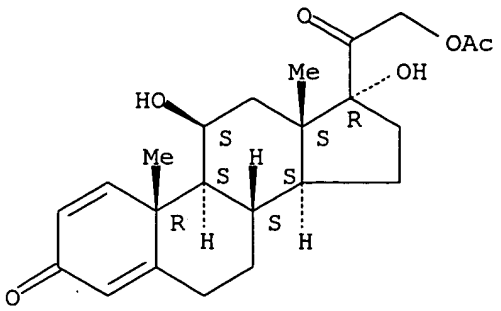
L15 ANSWER 12 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:154409 CAPLUS
DOCUMENT NUMBER: 132:284083
TITLE: Simultaneous interaction of steroidal drugs with γ- and hydroxypropyl-β- **cyclodextrin** studied by charge-transfer chromatography
AUTHOR(S): Cserhati, Tibor; Forgacs, Esther
CORPORATE SOURCE: Chemical Research Center, Hungarian Academy of Sciences, Institute of Chemistry, Budapest, 1525, Hung.
SOURCE: Journal of Pharmaceutical and Biomedical Analysis (2000), 22(1), 25-31
CODEN: JPBADA; ISSN: 0731-7085
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The simultaneous interaction of 15 steroidal drugs with γ-**cyclodextrin** (γCD) and hydroxypropyl-β-CD (HPβCD) was determined by charge transfer chromatog. and the relative strength of interaction was calculated for each drug-γCD-HPβCD ternary complex. The mixture of CDs interacted with each steroidal drug decreasing the lipophilicity of the guest mols. The chemical structure of steroidal drugs markedly influenced their capacity to interact with the mixture of CDs, the more lipophilic compds. formed stronger complexes with CDs. In the overwhelming majority of cases the stability of drug-γCD-HPβCD system was higher than those of binary (drug-γCD and drug-HPβCD) system indicating the probability of ternary complex formation. The data indicated that the ternary complex formation has to be taken into consideration in pharmaceutical formulations containing more than 1 type of CD or CD derivs.

IT **52-21-1**
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(simultaneous interaction of steroidal drugs with γ- and hydroxypropyl-β- **cyclodextrin** study by charge-transfer chromatog.)

RN 52-21-1 CAPLUS
CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 13 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1994:517696 CAPLUS
DOCUMENT NUMBER: 121:117696
TITLE: Derivatives of **cyclodextrins** exhibiting enhanced aqueous solubility and the use thereof
INVENTOR(S): Stella, Valentino J.; Rajewski, Roger
PATENT ASSIGNEE(S): University of Kansas, USA
SOURCE: PCT Int. Appl., 72 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9402518	A1	19940203	WO 1993-US6880	19930726
W: AU, CA, JP, KR, RU				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 06511513	T2	19941222	JP 1994-504678	19920726
JP 3393253	B2	20030407		
US 5376645	A	19941227	US 1992-918702	19920727
AU 9347799	A1	19940214	AU 1993-47799	19930726
AU 672814	B2	19961017		
EP 620828	A1	19941026	EP 1993-918302	19930726
EP 620828	B1	20020508		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
MD 1813	B2	20011231	MD 1996-306	19930726
AT 217325	E	20020515	AT 1993-918302	19930726

PRIORITY APPLN. INFO.: US 1992-918702 A 19920727
US 1990-469087 A2 19900123
WO 1993-US6880 W 19930726

OTHER SOURCE(S): MARPAT 121:117696

AB Sulfoalkyl ether **cyclodextrin** derivs. and their use as solubilizing agents for water insol. drugs for oral, intranasal, or parenteral administration are disclosed. For example, β-**cyclodextrin** sulfopropyl ether (7 substituents per **cyclodextrin** mol.) was prepared and association consts. for the equilibrium between the sulfopropyl derivs. and drugs, i.e. digoxin, progesterone, testosterone, and phenytoin were studied.

L15 ANSWER 14 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1991:589787 CAPLUS
DOCUMENT NUMBER: 115:189787
TITLE: Derivatives of **cyclodextrins** exhibiting enhanced aqueous solubility and the use thereof
INVENTOR(S): Stella, Valentino; Rajewski, Roger

PATENT ASSIGNEE(S): University of Kansas, USA
SOURCE: PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9111172	A1	19910808	WO 1991-US326	19910122
W: AU, CA, JP, KR, SU				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
US 5134127	A	19920728	US 1990-469087	19900123
CA 2074186	AA	19910724	CA 1991-2074186	19910122
CA 2074186	C	20010403		
AU 9172364	A1	19910821	AU 1991-72364	19910122
AU 646020	B2	19940203		
EP 512050	A1	19921111	EP 1991-903891	19910122
EP 512050	B1	19980909		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 05504783	T2	19930722	JP 1991-504051	19910122
JP 2722277	B2	19980304		
AT 170742	E	19980915	AT 1991-903891	19910122
RU 2099354	C1	19971220	RU 1992-5052811	19920722
PRIORITY APPLN. INFO.:			US 1990-469087 A	19900123
			WO 1991-US326 A	19910122

OTHER SOURCE(S): MARPAT 115:189787

AB **Cyclodextrin** sulfoalkyl ethers (Markush given) are prepared as clathrating agents to enhance the water solubility of drugs. A mixture containing β- **cyclodextrin** 5, NaOH 2 g, and 10 mL water was treated with 4.5 mL of butane sultone and the resulting solution was neutralized with 1 N HCl to give sulfobutyl ether of β- **cyclodextrin**. The product exhibited no observable toxic effects in mice over a 30 day period following i.p. injection of 0.00549 mol/kg.

L15 ANSWER 15 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:384590 CAPLUS
DOCUMENT NUMBER: 143:180437
TITLE: Bimodal Complexations of Steroids with **Cyclodextrins** by a Flexible Docking Algorithm
AUTHOR(S): Cai, Wensheng; Yao, Xuexia; Shao, Xueguang; Pan, Zhongxiao
CORPORATE SOURCE: Department of Chemistry, University of Science and Technology of China, Hefei, Anhui, 230026, Peop. Rep. China
SOURCE: Journal of Inclusion Phenomena and Macrocyclic Chemistry (2005), 51(1-2), 41-51
CODEN: JIPCF5; ISSN: 1388-3127
PUBLISHER: Springer
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A flexible docking algorithm was developed for studying the inclusion complexes of **cyclodextrins** with steroids in aqueous solution by an optimization method and an empirical function. The function is used to estimate the binding free energy including intermol. interaction energy, the conformational energy change, and the solvation energy. The bimodal complexations of twelve steroids in β- and γ-CD cavities were studied by the algorithm. For the two orientations of the guests in the cavity, the possible binding regions were investigated, and the lowest energies for the inclusion complexes in the binding regions were obtained. The stability constant for each orientation was estimated from the optimized

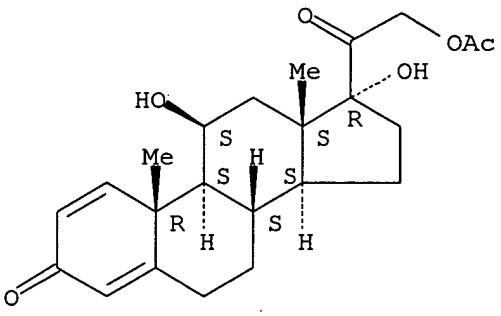
energy components by a quant. model. Therefore, the preferential orientations of the guests were found out from the results finally.

IT **52-21-1, Prednisolone acetate**
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process)
(bimodal complexations of steroids with **cyclodextrins** by flexible docking algorithm)

RN 52-21-1 CAPLUS

CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 16 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1201034 CAPLUS
DOCUMENT NUMBER: 143:466181
TITLE: Therapeutic ophthalmic compositions containing retinal friendly excipients such as **cyclodextrins** and related methods
INVENTOR(S): Hughes, Patrick M.; Delahaye, Laurent; Boix, Michele; Chang, James N.; Lyons, Robert T.
PATENT ASSIGNEE(S): Allergan, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 54 pp., Cont.-in-part of U.S. Ser. 966,764.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2005250737	A1	20051110	US 2005-91977		20050328
US 2005101582	A1	20050512	US 2004-966764		20041014
PRIORITY APPLN. INFO.:			US 2003-519232P	P	20031112
			US 2003-530062P	P	20031216
			US 2004-966764	A2	20041014
			US 2003-519237P	P	20031112

AB Pharmaceutical compns. suitable for administration into the interior of an eye of a person or animal are described. The present compns. include one or more components which are effective in providing a reduced toxicity relative to existing intraocular ophthalmic compns. The present compns. include one or more therapeutic agents in amts. effective in providing a desired therapeutic effect when placed in an eye, and one or more retinal friendly excipients that have a reduced toxicity relative to benzyl alc. or Polysorbate 80. In certain compns., the excipient component of the compns. comprises one or more **cyclodextrins** or

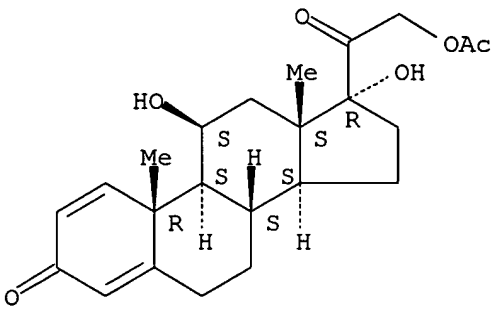
cyclodextrin derivs. Methods of using the compns. to treat ocular conditions are also described. Thus, eight groups of rabbits (3/group) were given a single intravitreal injection (0.1 mL) of one of the following compns. into the left eye of a rabbit: (1) Kenalog-40 (4% triamcinolone acetonide (TA); 4 mg TA/0.1 mL); (2) 2% hyaluronic acid (HA) + 4% TA; (3) 0.5% sulfobutyl ether β- **cyclodextrin** + 4% TA; (4) 55% sulfobutyl ether β- **cyclodextrin** + 4% TA; (5) 0.5% γ- **cyclodextrin** + 4% TA; (6) 5% γ- **cyclodextrin** + 4% TA; (7) 0.5% vitamin E-TPGS + 4% TA; and (8) 2% vitamin E-TPGS + 4% TA. The right eye of the rabbit received a similar volume of 0.9% NaCl. No significant changes in the ERG b-wave were observed in eyes given compns. (1) and (2), while reaction to other compns. was detected, such as subacute vitreitis, chronic chorioretinitis, degenerative and necrotic lesions of the optic nerve head and retina characterized by edema, axonal eosinophilia, etc.

IT **52-21-1, Prednisolone acetate**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(retina-friendly excipients for ophthalmic compns. containing steroids)

RN 52-21-1 CAPLUS

CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L15 ANSWER 17 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:513160 CAPLUS

DOCUMENT NUMBER: 143:120715

TITLE: Microemulsion electrokinetic chromatography of corticosteroids. Effect of surfactants and **cyclodextrins** on the separation selectivity

AUTHOR(S): Pomponio, Romeo; Gotti, Roberto; Fiori, Jessica; Cavrini, Vanni

CORPORATE SOURCE: Dipartimento di Scienze Farmaceutiche, Universita di Bologna, Bologna, 40126, Italy

SOURCE: Journal of Chromatography, A (2005), 1081(1), 24-30
CODEN: JCRAEY; ISSN: 0021-9673

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The separation of neutral hydrophobic corticosteroids (cortisone, cortisone acetate, hydrocortisone, hydrocortisone acetate, prednisolone, and **prednisolone acetate**) by microemulsion electrokinetic chromatog. (MEEKC) was studied. In the preparation of microemulsion, heptane was the solvent, n-butanol the co-surfactant and, as anionic surfactants, sodium dodecyl sulfate (SDS) or taurodeoxycholic acid sodium salt (STDC) were employed. Using an acidic running buffer, (phosphate pH 2.5) a strong suppression of the electroosmotic flow (EOF) was observed; this resulted in a fast anodic migration of the analytes partitioned into the neg. charged microemulsion droplets. Under these conditions, STDC showed

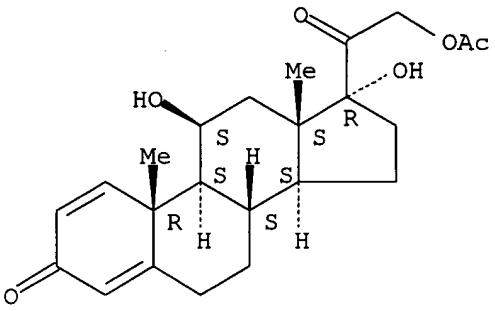
better separation of corticosteroids than the conventional SDS; however, the use of a single anionic surfactant did not provide the required selectivity. The addition of the neutral surfactant polyoxyethylene glycol octadecyl ether (Brij 76) significantly altered the migration of each analytes allowing a better tuning of separation; however, to obtain adequate resolution between couples of adjacent critical peaks, the addition of neutral **cyclodextrins** (CDs) was found to be essential. This apparently complex system (CD-MEEKC), was optimized by studying the effect of the most important parameters affecting separation: STDC concentration, Brij 76 concentration,
nature and concentration of **cyclodextrins**. Following a rational step-by-step approach, the optimized conditions providing the complete separation of the analytes were found to be: 4.0% STDC, 2.5% Brij 76, 6.6% n-butanol, 1.36% heptane, and 85.54% of a solution 5 mM β-CD in 50 mM phosphate buffer (pH 2.5). The optimized system was preliminary applied to the detection of corticosteroids related substances at impurity level and it could be considered a useful orthogonal alternative to HPLC methods.

IT **52-21-1, Prednisolone acetate**
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(microemulsion electrokinetic chromatog. of corticosteroids)

RN 52-21-1 CAPLUS

CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 18 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:807406 CAPLUS

DOCUMENT NUMBER: 130:158357

TITLE: Inclusion complex formation of steroidal drugs with hydroxypropyl-β- **cyclodextrin** studied by charge-transfer chromatography

AUTHOR(S): Cserhiti, Tibor; Forgacs, Esther

CORPORATE SOURCE: Central Research Institute for Chemistry, Hungarian Academy of Sciences, Budapest, H-1525, Hung.

SOURCE: Journal of Pharmaceutical and Biomedical Analysis (1998), 18(1,2), 179-185
CODEN: JPBADA; ISSN: 0731-7085

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The interaction between 17 steroidal drugs and hyroxypropyl-β- **cyclodextrin** (HPβBCD) was determined by charge-transfer chromatog. and the relative strength of interaction was calculated HPβCD interacted with each steroidal drugs decreasing the hydrophobicity of the guest mols.

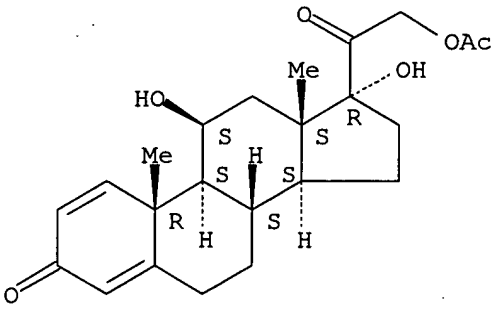
The relative strength of interaction considerably depended on the structure of the drug mol. Hydrophobicity parameters of drugs significantly influenced the strength of interaction indicating the involvement of hydrophobic forces in the binding of drugs to HPβCD. The marked influence of HPβCD on the hydrophobicity of drugs suggests that this interaction may modify the biol. properties (adsorption, uptake, half-life etc.) of drug-HPβCD complexes drug resulting in modified efficacy.

IT **52-21-1**
RL: PRP (Properties); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(inclusion complex formation of steroidal drugs with hydroxypropyl-β- **cyclodextrin** study by charge-transfer chromatog.)

RN 52-21-1 CAPLUS

CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 19 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:756269 CAPLUS

DOCUMENT NUMBER: 130:86053

TITLE: Modification of the apparent lipophilicity of steroidal drugs with gamma-**cyclodextrin**

AUTHOR(S): Cserhati, Tibor; Forgacs, Esther

CORPORATE SOURCE: Central Research Institute Chemistry, Hungarian Academy Sciences, Budapest, H-1525, Hung.

SOURCE: European Journal of Pharmaceutics and Biopharmaceutics (1998), 46(2), 153-159
CODEN: EJPBEL; ISSN: 0939-6411

PUBLISHER: Elsevier Science Ireland Ltd.

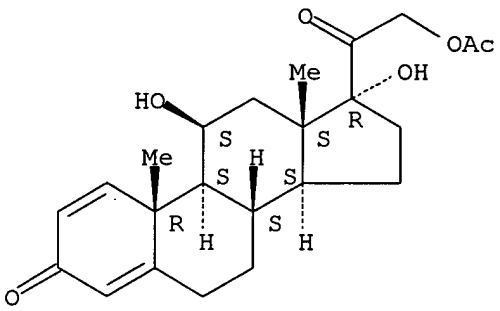
DOCUMENT TYPE: Journal

LANGUAGE: English

AB The interaction between 17 steroidal drugs and γ-**cyclodextrin** (γ-CD) was determined by charge-transfer chromatog. and the relative strength of interaction was calculated The relationship between the strength of interaction and the physicochem. parameters of steroidal drugs was elucidated with principal component anal. γ-CD interacted with each steroidal drug decreasing the apparent hydrophobicity of the guest mols. Calcns. indicated that the interaction between the drugs and γ-CD is of mixed character: steric, hydrophobic, and electronic forces are involved in the complex formation. The marked influence of γ-CD on the apparent hydrophobicity of drugs suggests that this interaction may modify the biol. properties (absorption, uptake, half-life etc.) of drug-γ-CD complexes resulting in modified efficacy.

IT **52-21-1**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(modification of lipophilicity of steroidal drugs with γ-**cyclodextrin**)
RN 52-21-1 CAPLUS
CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

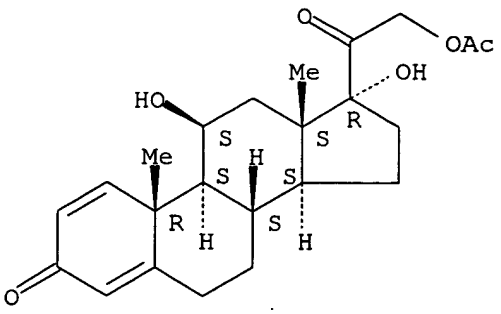
Absolute stereochemistry.



REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 20 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:289342 CAPLUS
DOCUMENT NUMBER: 127:900
TITLE: Influence of the structure of steroid hormones on their association with **cyclodextrins**: a high-performance liquid chromatography study
AUTHOR(S): Sadlej-Sosnowska, Nina
CORPORATE SOURCE: Drug Institute, Warsaw, 00-725, Pol.
SOURCE: Journal of Inclusion Phenomena and Molecular Recognition in Chemistry (1997), 27(1), 31-40
CODEN: JIMCEN; ISSN: 0923-0750
PUBLISHER: Kluwer
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The association consts. of fourteen steroid hormones with β- and γ-**cyclodextrin** were measured in methanol-water (20:80 volume/volume) at 35 °C using the chromatog. Hummel-Dreyer method. It was found that the greatest influence on the association consts. is the structural features of ring A of these compds. but the substituents of ring D also alter the complex stability to an appreciable degree. The measured association consts. were considerably greater than the corresponding values measured previously in the medium containing more methanol (45 instead of 20%).
IT **52-21-1, Prednisolone acetate**
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(steroid hormone structure effect on association with **cyclodextrins** as detected by HPLC)
RN 52-21-1 CAPLUS
CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

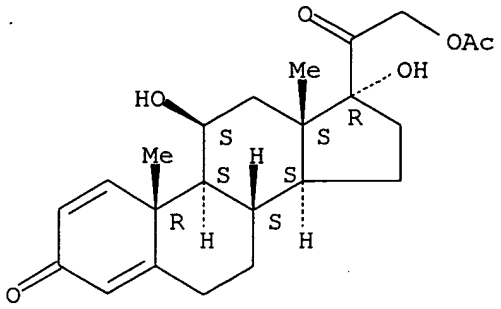
L15 ANSWER 21 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:702633 CAPLUS
DOCUMENT NUMBER: 141:289224
TITLE: Study of the interaction of some steroidal drugs with **cyclodextrin** derivatives
AUTHOR(S): Forgacs, Esther; Cserhati, Tibor
CORPORATE SOURCE: Institute of Chemistry, Chemical Research Center, Hungarian Academy of Sciences, Budapest, Hung.
SOURCE: Analytical Letters (2004), 37(9), 1897-1908
CODEN: ANALBP; ISSN: 0003-2719
PUBLISHER: Marcel Dekker, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Spectral mapping (SPM) technique has been employed for the separation of the strength and selectivity of interaction among 13 steroidal drugs and 7 different **cyclodextrins** (CDs) or CD derivs. The potency values were considered as the best indicators of the capacity of drugs and CDs to interact with each other. Both drugs and CDs show marked differences in their capacity to form inclusion complexes. Because of the larger diameter of the cavity τ-CDs showed higher interactive forces than β-CD derivs. did. Substituents on the CD ring also modified the strength and selectivity of interaction. Stepwise regression anal. proved that the electron withdrawing power of substituents exerted the highest impact on both strength and selectivity of interaction. The data suggest that the interaction between steroidal drugs and CDs depends on the sterical correspondence between the dimensions of the CD cavity and the bulky ring structure of drugs and on the polar interactions between the hydrophilic substituents of drugs pointing outward from the CD cavity and the polar hydroxyl groups in the outer sphere of CD mols.

IT **52-21-1**
RL: BSU (Biological study, unclassified); DMA (Drug mechanism of action); PRP (Properties); BIOL (Biological study)
(interaction of some steroidal drugs with **cyclodextrin** derivs.)

RN 52-21-1 CAPLUS
CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



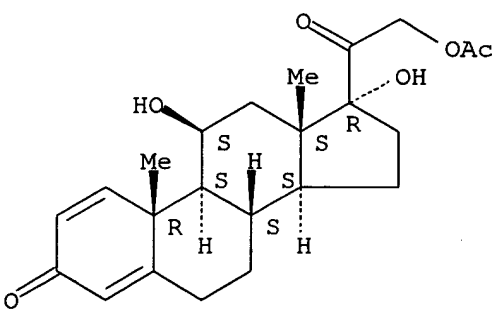
REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 22 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:59948 CAPLUS
DOCUMENT NUMBER: 118:59948
TITLE: Quantitative structure-stability relationships in the inclusion complexes of steroids with **cyclodextrins**
AUTHOR(S): Marzona, Mario; Carpignano, Rosarina; Quagliotto, Pierluigi
CORPORATE SOURCE: Dip. Chim. Gen. Org. Appl., Univ. Torino, Turin, 10125, Italy
SOURCE: Annali di Chimica (Rome, Italy) (1992), 82(9-10), 517-37
CODEN: ANCRAI; ISSN: 0003-4592
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The inclusion consts. of 18 steroid hormones in α-, β-, and γ- **cyclodextrin** are analyzed as a function of structure by the partial least squares method. To describe the steroid structure various kinds of descriptors are used: physicochem. properties of the compds., physicochem. parameters of substituents, connectivity indexes, and indicator variables. The anal. permits the estimate of quant. relationships between each inclusion constant and the structural features. For 1:1 α- **cyclodextrin**-steroid complexes a model, which can be used to predict the stability of new complexes, is developed, and some inference on the disposition of the guest compound in the **cyclodextrin** cavity is drawn.

IT **52-21-1, Prednisolone acetate**
RL: PRP (Properties)
(connectivity indexes of)
RN 52-21-1 CAPLUS
CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L15 ANSWER 23 OF 38 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2002144889 EMBASE
TITLE: **Cyclodextrins** in eye drop formulations: Enhanced topical delivery of corticosteroids to the eye.
AUTHOR: Loftsson T.; Stefansson E.
CORPORATE SOURCE: Dr. E. Stefansson, University of Iceland, Lanspitali-Univ. Hospital, Department of Ophthalmology, IS-101 Reykjavik, Iceland. estefans@hi.is
SOURCE: Acta Ophthalmologica Scandinavica, (2002) Vol. 80, No. 2, pp. 144-150. .
Refs: 51
ISSN: 1395-3907 CODEN: AOSCFV
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 012 Ophthalmology
030 Pharmacology
037 Drug Literature Index
039 Pharmacy
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 8 May 2002
Last Updated on STN: 8 May 2002

AB **Cyclodextrins** are cylindrical oligosaccharides with a lipophilic central cavity and hydrophilic outer surface. They can form water-soluble complexes with lipophilic drugs, which 'hide' in the cavity. **Cyclodextrins** can be used to form aqueous eye drop solutions with lipophilic drugs, such as steroids and some carbonic anhydrase inhibitors. The **cyclodextrins** increase the water solubility of the drug, enhance drug absorption into the eye, improve aqueous stability and reduce local irritation. **Cyclodextrins** are useful excipients in eye drop formulations of various drugs, including steroids of any kind, carbonic anhydrase inhibitors, pilocarpine, cyclosporins, etc. Their use in ophthalmology has already begun and is likely to expand the selection of drugs available as eye drops. In this paper we review the properties of **cyclodextrins** and their application in eye drop formulations, of which their use in the formulation of dexamethasone eye drops is an example. **Cyclodextrins** have been used to formulate eye drops containing corticosteroids, such as dexamethasone, with levels of concentration and ocular absorption which, according to human and animal studies, are many times those seen with presently available formulations. **Cyclodextrin**-based dexamethasone eye drops are well tolerated in the eye and seem to provide a higher degree of bioavailability and clinical efficiency than the steroid eye drop formulations presently available. Such formulations offer the possibility of once per day application of corticosteroid eye drops after eye surgery, and more intensive topical steroid treatment in severe inflammation. While **cyclodextrins** have been known for more than a century, their use in ophthalmology is just starting. **Cyclodextrins** are useful excipients in eye drop formulations for a variety of lipophilic drugs. They will facilitate eye drop formulations for drugs that otherwise might not be available for topical use, while improving absorption and stability and decreasing local irritation.

L15 ANSWER 24 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1176749 CAPLUS
DOCUMENT NUMBER: 143:446750
TITLE: Intraocular drug delivery systems containing excipients with reduced toxicity
INVENTOR(S): Hughes, Patrick M.; Delahaye, Laurent; Boix, Michele
PATENT ASSIGNEE(S): Allergan, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 42 pp.

CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005244472	A1	20051103	US 2005-92122	20050328
WO 2005110374	A1	20051124	WO 2005-US10578	20050328

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

WO 2005110436	A2	20051124	WO 2005-US13581	20050420
WO 2005110436	A3	20060615		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

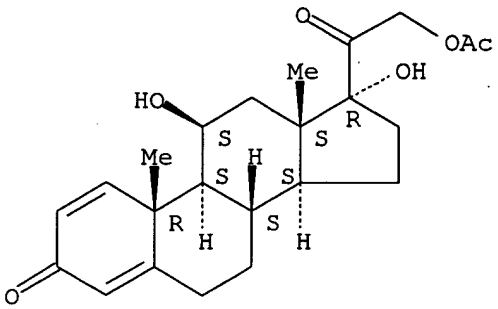
PRIORITY APPLN. INFO.: US 2004-567423P P 20040430

AB Drug delivery systems suitable for administration into the interior of an eye of a person or animal are described. The present systems include one or more components which are effective in improving a release profile of a drug from the system, improving the stability of the drug, and improving the ocular tolerability of the drug. The present systems include one or more therapeutic agents in amts. effective in providing a desired therapeutic effect when placed in an eye, and an excipient component with reduced toxicity to retinal cells. The excipient component may include a **cyclodextrin** component that may be complexed with the therapeutic agents to provide advantages over existing intraocular drug delivery systems. The **cyclodextrin** component of the present systems have a reduced toxicity relative to benzyl alc. or polysorbate 80. The drug delivery systems include one or more drug delivery elements such as microparticles, bioerodible implants, non-bioerodible implants, and combinations thereof. A 10% hydroxypropyl γ- **cyclodextrin** solution displayed high osmolarity values as an example excipient.

IT **52-21-1, Prednisolone acetate**
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(intraocular drug delivery systems containing excipients with reduced toxicity)

RN 52-21-1 CAPLUS
CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L15 ANSWER 25 OF 38 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1983:163057 BIOSIS
DOCUMENT NUMBER: PREV198375013057; BA75:13057
TITLE: INCLUSION COMPLEXATIONS OF STEROID HORMONES WITH CYCLO DEXTRINS IN WATER AND IN SOLID PHASE.
AUTHOR(S): UEKAMA K [Reprint author]; FUJINAGA T; HIRAYAMA F; OTAGIRI M; YAMASAKI M
CORPORATE SOURCE: FAC PHARMACEUTICAL SCI, KUMAMOTO UNIV, 5-1, OE-HONMACHI, KUMAMOTO 862
SOURCE: International Journal of Pharmaceutics (Kidlington), (1982) Vol. 10, No. 1, pp. 1-16.
CODEN: IJPHDE. ISSN: 0378-5173.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB **Cyclodextrins** (CyD) have received considerable attention in pharmaceutical fields because of improved aqueous solubility, chemical stability and bioavailability of various drug molecules through inclusion complex formation. Inclusion complexation of 18 steroid hormones [hydrocortisone, cortisone, hydrocortisone acetate, cortisone acetate, progesterone, testosterone, prednisolone, **prednisolone acetate**, triamcinolone, triamcinolone acetate, triamcinolone diacetate, dexamethasone, betamethasone, dexamethasone acetate, betamethasone-17-valerate, paramethasone, fluocinolone acetonide and beclomethasone diproprionate] with 3 CyD (α-, β- and γ-CyD) in water and in solid phase were studied by the solubility method, spectroscopies (UV, CD [circular dichroism], IR and 1H-NMR), X-ray diffractometry and thermal analysis, and their modes of interactions were assessed. A spatial relationship between host and guest molecules was clearly reflected in the magnitude of the stability constant (γ- > β- > α-CyD) and in the stoichiometry of the inclusion complexes. The 1H-NMR studies including spin-lattice relaxation time and chemical shift measurements suggested that the A-ring of the steroid molecule was predominantly included in the cavity of CyD. The solid complexes of some steroids with β- and γ-CyD were obtained generally in the molar ratios of 1:2 and 2:3, respectively, and their dissolution behaviors were examined. The CyD complexes may have a great utility as a rapidly dissolving form of steroids in water.

L15 ANSWER 26 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1170338 CAPLUS
DOCUMENT NUMBER: 143:446695
TITLE: Immediate release compositions for acute glucocorticoid therapy for mucus absorption
INVENTOR(S): Skrtic, Stanko; Johnsson, Joergen; Lennernaes, Hans; Hedner, Thomas; Johannsson, Gudmundur
PATENT ASSIGNEE(S): Duocort AB, Swed.
SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005102287	A2	20051103	WO 2005-EP4399	20050421
WO 2005102287	A3	20060622		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

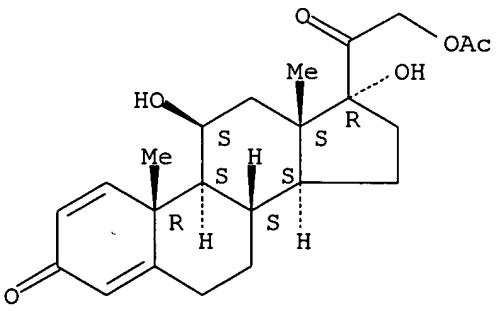
PRIORITY APPLN. INFO.: SE 2004-1032 A 20040422
US 2004-564206P P 20040422

AB The present invention relates to glucocorticoid-containing pharmaceutical compns. or kits for use in acute emergency situations where acute glucocorticoid therapy is required. Notably, the invention relates to pharmaceutical compns. and kits that are designed to be administered by non-medically trained persons outside a hospital or another medical or clin. setting. For example, immediate release thin film containing prednisolone 75%, PEG 400 2%, Methocel ES 4%, xylitol 1% and water to 100% was prepared for administration to the oral cavity.

IT **52-21-1, Prednisolone acetate**
RL: PKT (Pharmacokinetics); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immediate release compns. for acute glucocorticoid therapy for mucus absorption)

RN 52-21-1 CAPLUS
CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



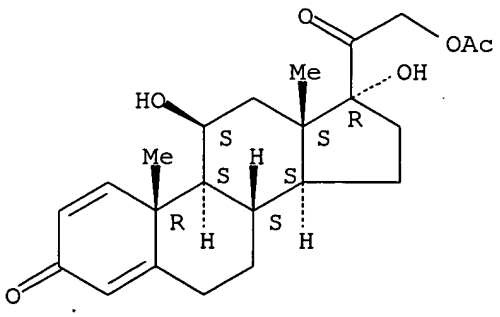
L15 ANSWER 27 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:475335 CAPLUS
DOCUMENT NUMBER: 125:158844
TITLE: Mixed micelles of short chain alkyl surfactants and bile salts in electrokinetic chromatography:. Enhanced separation of corticosteroids

AUTHOR(S): Bumgarner, Jefferson G.; Khaledi, Morteza G.
CORPORATE SOURCE: Department of Chemistry, North Carolina State University, P.O. Box 8204, Raleigh, NC, 27695-8204, USA
SOURCE: Journal of Chromatography, A (1996), 738(2), 275-283
CODEN: JCRAEY; ISSN: 0021-9673
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The separation of a complex mixture of 17 corticosteroids was investigated by mixed micellar electrokinetic chromatog. (MMEKC) employing various bile salts and/or alkylsulfonates. In this study, influence of individual surfactants and mixed micelles of hydrocarbon-bile salt surfactants on retention behavior, selectivity and the size of the elution window is investigated. Retention behavior of corticosteroids in SDS and bile salt micelles is examined using linear solvation energy relationships (LSER). In addition, the effects of type of bile salt surfactant on elution patterns were investigated. It was found that separation patterns are mostly influenced by the number of hydroxyl functional groups on the steroidal backbone of the bile salts, while the type of ionic head group has little, if any, effect on the steroids separation Comparisons between mixed micellar techniques and the inclusion of conventional modifiers to various single and binary surfactant systems were made. The addition of modifiers such as acetonitrile, urea and β- **cyclodextrin** to SDS surfactant systems, as well as mixed bile salt systems of sodium taurocholate and sodium glycodeoxycholate, did not improve the separation of the steroids. The addition of the short-chain alkylsulfonate sodium butanesulfonate to the mixture of taurocholate and glycodeoxycholate greatly improved the separation of the 17 corticosteroids and provided a baseline separation of all solutes. The effects of carbon chain length and concentration of alkylsulfonate on capacity factor, selectivity, efficiency and the size of the elution window were investigated.

IT **52-21-1, Prednisolone acetate**
RL: PRP (Properties)
(mixed micelles of short chain alkyl surfactants and bile salts in electrokinetic chromatog. for enhanced corticosteroid separation)
RN 52-21-1 CAPLUS
CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L15 ANSWER 28 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:960660 CAPLUS
DOCUMENT NUMBER: 138:19488
TITLE: Method and pharmaceutical compositions using anti-microtubule agents for treating multiple sclerosis and other inflammatory diseases

INVENTOR(S): Hunter, William L.
PATENT ASSIGNEE(S): Angiotech Pharmaceuticals, Inc., Can.
SOURCE: U.S., 180 pp., Cont.-in-part of U.S. Appl. 2002 37,919.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6495579	B1	20021217	US 1998-88546	19980601
US 2002037919	A1	20020328	US 1997-980549	19971201
US 6515016	B2	20030204		
EP 1070502	A2	20010124	EP 2000-123557	19971202
EP 1070502	A3	20011017		
EP 1070502	B1	20030604		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
EP 1090637	A2	20010411	EP 2000-123537	19971202
EP 1090637	A3	20010912		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
EP 1092433	A2	20010418	EP 2000-123534	19971202
EP 1092433	A3	20010912		
EP 1092433	B1	20030806		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002226399	A2	20020814	JP 2001-401899	19971202
EP 1582210	A2	20051005	EP 2005-11601	19971202
EP 1582210	A3	20051012		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
CN 1679937	A	20051012	CN 2005-10054770	19971202
WO 9962510	A2	19991209	WO 1999-CA464	19990601
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002013298	A1	20020131	US 1999-368463	19990804
US 2002183380	A1	20021205	US 2002-67467	20020205
US 6689803	B2	20040210		
US 2003157187	A1	20030821	US 2002-172737	20020613
AU 2004200715	A1	20040318	AU 2004-200715	20040220
US 2005249770	A1	20051110	US 2005-102587	20050408

PRIORITY APPLN. INFO.:		
US 1996-32215P	P	19961202
US 1997-63087P	P	19971024
US 1997-980549	A2	19971201
CN 1997-181581	A3	19971202
EP 1997-945697	A3	19971202
EP 2000-123537	A3	19971202
JP 1998-524997	A3	19971202
US 1998-88546	A	19980601
US 1999-368463	B1	19990804
US 1999-368871	A1	19990804
AU 2001-48029	A3	20010525
US 2002-172737	B1	20020613

AB Methods and compns. for treating or preventing inflammatory diseases, e.g.

EP 665009	B1	20000216			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE					
AT 189770	E	20000315	AT 1993-922625		19931013
ES 2145063	T3	20000701	ES 1993-922625		19931013
US 5456923	A	19951010	US 1993-129133		19931115
PRIORITY APPLN. INFO.:			JP 1992-303085	A	19921014
			WO 1993-JP1469	W	19931013
			US 1993-129133	A2	19931115
			JP 1991-112554	A	19910416
			WO 1992-JP470	W	19920414

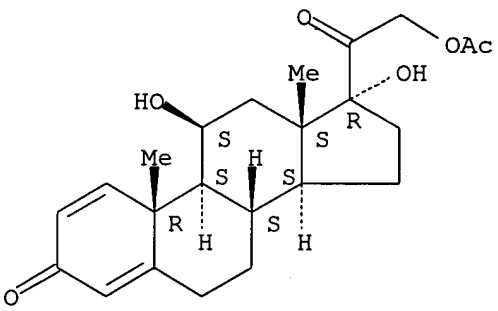
AB This invention has for its object to provide a method of inducing a transition in crystalline state of a crystallizable pharmaceutical with great ease and improved efficiency and uniformity on a high production scale. An extruder is used for inducing a transition from one crystalline state (Δ) to another crystalline state in a crystallizable pharmaceutical. An extruded indomethacin (form α) was converted to an amorphous form.

IT **52-21-1, Prednisolone acetate**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(method for inducing crystalline state transition in pharmaceuticals)

RN 52-21-1 CAPLUS

CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 32 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:	1996:43018 CAPLUS
DOCUMENT NUMBER:	124:66659
TITLE:	Topical polymeric drug delivery system
INVENTOR(S):	Winters, Conrad; Clas, Sophie-Dorothee; Kwong, Elizabeth; Meisner, Dale; Vadas, Elizabeth B.
PATENT ASSIGNEE(S):	Merck Frosst Canada Inc., Can.
SOURCE:	PCT Int. Appl., 17 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9530409	A1	19951116	WO 1995-CA260	19950502
W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TT, UA, US, UZ				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT,				

LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

CA 2188566	AA	19951116	CA 1995-2188566	19950502
AU 9524024	A1	19951129	AU 1995-24024	19950502
EP 758229	A1	19970219	EP 1995-917847	19950502
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
JP 09512562	T2	19971216	JP 1995-528565	19950502
PRIORITY APPLN. INFO.:			US 1994-238409	A2 19940505
			WO 1995-CA260	W 19950502

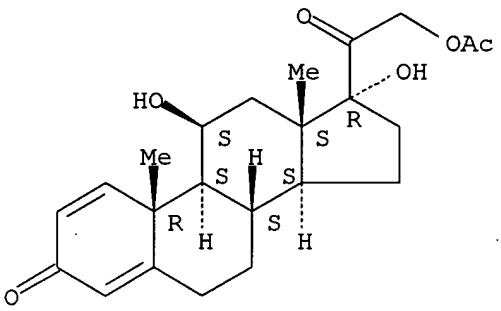
AB A topical polymeric drug delivery system for the delivery of drugs to the skin for either topical or systemic effect is described. The system involves the use of a propellant-free airless pump for the delivery. The delivery system comprises (1) a film-forming polymer, (2) a plasticizing agent, (3) a solvent effective for film formation of the polymer, and (4) a crystallization inhibitor and/or a penetration enhancer. Poly(2-hydroxyethyl methacrylate) was dissolved in a Tween/EtOH solution and indomethacin was added to the solution The resultant solution was left to evaporate to obtain a filmswith moisture level <3%. The film was subjected to a dissoln. test to show controlled release of indomethacin.

IT **52-21-1, Prednisolone acetate**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(topical polymeric drug delivery system)

RN 52-21-1 CAPLUS

CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L15 ANSWER 33 OF 38 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2003354133 EMBASE

TITLE: A comparison of two different formulations of diclofenac sodium 0.1% in the treatment of inflammation following cataract-intraocular lens surgery.

AUTHOR: Mester U.; Lohmann C.; Pleyer U.; Steinkamp G.; Volcker E.; Kruger H.; Sunder Raj P.

CORPORATE SOURCE: Dr. P. Sunder Raj, 8 Pollard Close, Leicestershire LE13 1UY, Germany. palaniswamy.sunderraj@pharma.novartis.com

SOURCE: Drugs in R and D, (2002) Vol. 3, No. 3, pp. 143-151. .
Refs: 27
ISSN: 1174-5886 CODEN: DRDDFD

COUNTRY: New Zealand

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 012 Ophthalmology
037 Drug Literature Index
038 Adverse Reactions Titles
039 Pharmacy

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 18 Sep 2003
Last Updated on STN: 18 Sep 2003

AB Objective: To compare the efficacy, tolerability and local tolerance of diclofenac sodium 0.1% containing hydroxypropylgamma **cyclodextrin** preserved with benzalkonium chloride 0.005% (Voltaren® Ophtha CD), with that of diclofenac sodium 0.1% preserved with thiomersal 0.004% (Voltaren® Ophtha) in the treatment of inflammation after cataract-intraocular lens surgery. Design and setting: Randomised 2 : 1, double-masked, parallel-group study in six centres in Germany. Study participants: 299 patients scheduled to undergo phacoemulsification with posterior chamber intraocular lens implantation. Interventions: Study medications were instilled four times in the 30 minutes before surgery and four times daily from the first postoperative day. Main outcome measures: The key efficacy variable was the reduction in anterior chamber flare (photons/millisecond) from day 1 to day 6 to 8. Patients underwent comprehensive ocular examinations, including laser flaremetry (KOWA), pre-operatively and postoperatively at days 1, 6 to 8 and 24 to 32. Results: 268 patients (Voltaren® Ophtha CD 177, Voltaren® Ophtha 91) completed the day 6 to 8 visit without any protocol violations. Reduction in the degree of intraocular inflammation with Voltaren® Ophtha CD was equivalent to that achieved with Voltaren® Ophtha at the day 6 to 8 [95% confidence interval (CI) -3.07 to +0.54] and day 24 to 32 (95% CI -1.44 to +1.40) visits. Although there was no significant ($p = 0.464$) difference between the two study groups in patients' global assessment of local tolerance at day 24 to 32, ocular discomfort was significantly ($p = 0.023$) less with Voltaren® Ophtha CD compared with Voltaren® Ophtha. Conclusions: Voltaren® Ophtha CD was as effective and well tolerated but had less ocular discomfort compared with Voltaren® Ophtha in the treatment of ocular inflammation after phacoemulsification with intraocular lens implantation. This new formulation of diclofenac sodium 0.1% may be used as an alternative to the existing formulations of ophthalmic diclofenac sodium 0.1%.

L15 ANSWER 34 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:272912 CAPLUS
DOCUMENT NUMBER: 144:299568
TITLE: Therapeutic lacrimal canalicular inserts and related methods
INVENTOR(S): Chang, Chin-Ming; Schiffman, Rhett; Chang, James; Jordan, Robert S.
PATENT ASSIGNEE(S): Allergan, Inc., USA
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

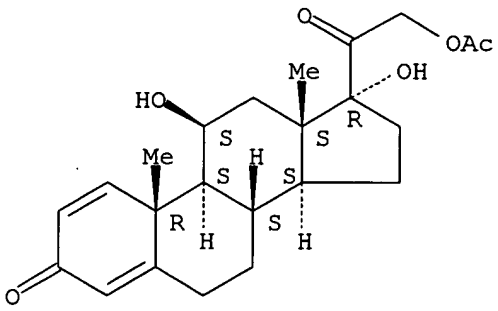
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006031658	A2	20060323	WO 2005-US32222	20050907
WO 2006031658	A3	20060413		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,

KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.: US 2004-608628P P 20040910
AB Lacrimal canalicular inserts include a polymeric component and a therapeutic component. The therapeutic component is released from the inserts for extended periods of time, such as for more than about 2 wk after placement in a lacrimal canaliculus of an individual. The polymeric component may include one or more non-biodegradable polymers, one or more biodegradable polymers, or combinations thereof. The therapeutic component may include one or more therapeutic agents. Therapeutically effective amts. of the therapeutic component are released from the insert and provide sustained drug delivery to the eye and/or the nasolacrimal system of the individual.
IT **52-21-1, Prednisolone acetate**
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(therapeutic lacrimal canalicular inserts)
RN 52-21-1 CAPLUS
CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L15 ANSWER 35 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:783929 CAPLUS
DOCUMENT NUMBER: 132:18780
TITLE: Compositions comprising antimicrotubule agents for treating or preventing inflammatory diseases
INVENTOR(S): Hunter, William L.
PATENT ASSIGNEE(S): Angiotech Pharmaceuticals, Inc., Can.
SOURCE: PCT Int. Appl., 340 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9962510	A2	19991209	WO 1999-CA464	19990601
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6495579	B1	20021217	US 1998-88546	19980601

AU 2004200715 A1 20040318 AU 2004-200715 20040220
PRIORITY APPLN. INFO.: US 1998-88546 A 19980601
US 1996-32215P P 19961202
US 1997-63087P P 19971024
US 1997-980549 A2 19971201
AU 2001-48029 A3 20010525

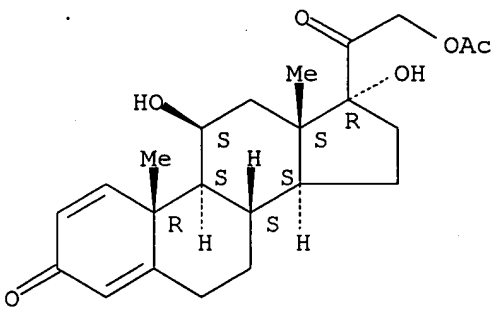
AB Methods and compns. for treating or preventing inflammatory diseases, e.g. psoriasis or multiple sclerosis, are provided, comprising the step of delivering to the site of inflammation an antimicrotubule agent, or analog or derivative thereof.

IT **52-21-1**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(antimicrotubule agents for treating or preventing inflammatory diseases)

RN 52-21-1 CAPLUS

CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L15 ANSWER 36 OF 38 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2004027038 EMBASE
TITLE: [Immunomodulation during penetrating keratoplasty. Current status and perspectives].
IMMUNMODULATION BEI PERFORIERENDER KERATOPLASTIK. STAND UND PERSPEKTIVEN.
AUTHOR: Pleyer U.
CORPORATE SOURCE: Dr. U. Pleyer, Charite, Universitatsmedizin Berlin, Campus Virchow Klinikum, Augustenburger Platz 1, 13353 Berlin, Germany. uwe.pleyer@charite.de
SOURCE: Ophthalmologe, (2003) Vol. 100, No. 12, pp. 1036-1044. .
Refs: 88
ISSN: 0941-293X CODEN: OHTHEJ
COUNTRY: Germany
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 012 Ophthalmology
026 Immunology, Serology and Transplantation
037 Drug Literature Index
038 Adverse Reactions Titles
LANGUAGE: German
SUMMARY LANGUAGE: English; German
ENTRY DATE: Entered STN: 29 Jan 2004
Last Updated on STN: 29 Jan 2004

AB The immune privileged nature of the cornea contributes to the favourable outcome in corneal grafts. However, preventive measures are necessary to reduce allograft rejection particular in "high-risk" cases. Although corticosteroids are still a major component of our immunopharmacological

armentarium, they might be supplemented by other more specific immunomodulating agents. The spectrum includes agents such as azathioprin, methotrexate or more specific calcineurin inhibitors affecting T-cells (cyclosporin A, FK506) and highly selective monoclonal antibodies directed against T-cell subpopulations and other targets. In order to better evaluate the risks and benefit of these agents, the properties of established and forthcoming agents are presented. In addition, this review attempts to address some new concepts of tolerance induction following penetrating keratoplasty.

L15 ANSWER 37 OF 38 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2004505791 EMBASE
TITLE: Immunomodulatory therapy in ophthalmology - Is there a place for topical application?.
AUTHOR: Bertelmann E.; Pleyer U.
CORPORATE SOURCE: E. Bertelmann, Augenklinik Charite, Universitatsmedizin Berlin, Campus Virchow Klinikum, Augustenburger Platz 1, DE-13353 Berlin, Germany. eckart.bertelmann@charite.de
SOURCE: Ophthalmologica, (2004) Vol. 218, No. 6, pp. 359-367. . Refs: 71
ISSN: 0030-3755 CODEN: OPHTAD
COUNTRY: Switzerland
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 012 Ophthalmology
026 Immunology, Serology and Transplantation
037 Drug Literature Index
038 Adverse Reactions Titles
039 Pharmacy
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 9 Dec 2004
Last Updated on STN: 9 Dec 2004

AB Topical corticosteroids, although effective in the treatment of ocular immune-mediated diseases, are well known for their ocular side-effects. Not surprisingly, a variety of alternative immunomodulatory agents have been tested for topical use including cyclosporin A (CsA), mycophenolate mofetil (MMF), tacrolimus (FK506), rapamycin (sirolimus) and leflunomide. Local application bears the possibility to avoid the severe side-effects of systemic therapy. The effect of topical therapy is naturally restricted to local immune response mechanisms, such as antigen presentation by Langerhans and dendritic cells. Moreover, many immunomodulatory agents (e.g. CsA) are lipophilic and thus have low water solubility and penetrate insufficiently intraocularly, often being stored in the lipophilic corneal epithelial barrier. Therefore, the therapeutical success is limited for intra-ocular immune-mediated diseases like anterior uveitis. However, a multitude of strategies have been introduced to circumvent these problems including complexing substances such as **cyclodextrins** (CDs) and liposomes. In the prevention and treatment of transplant rejection after keratoplasty, many attempts to introduce topical immunomodulatory therapy have failed; on the other hand, further therapeutic options not primarily expected are being evaluated today such as treatment of severe keratoconjunctivitis sicca. In our own studies, we investigated the pharmacokinetics of topical treatment with different agents including MMF and evaluated the efficacy of topical treatment in animal models for uveitis and keratoplasty. Taken together, topical immunomodulatory therapy will not replace systemic therapy but further treatment options can be expected. Copyright .COPYRGT. 2004 S. Karger AG, Basel.

L15 ANSWER 38 OF 38 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN

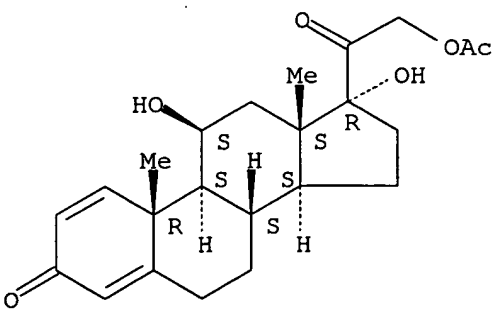
ACCESSION NUMBER: 2005275450 EMBASE

TITLE: Pharmaceuticals and related drugs.
AUTHOR: Gilpin R.K.; Pachla L.A.
CORPORATE SOURCE: Prof. R.K. Gilpin, Brehm Research Laboratories, College of Science and Mathematics, Wright State University, Dayton, OH 45435, United States
SOURCE: Analytical Chemistry, (15 Jun 2005) Vol. 77, No. 12, pp. 3755-3769. .
Refs: 451
ISSN: 0003-2700 CODEN: ANCHAM
COUNTRY: United States
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 037 Drug Literature Index
LANGUAGE: English
ENTRY DATE: Entered STN: 7 Jul 2005
Last Updated on STN: 7 Jul 2005
DATA NOT AVAILABLE FOR THIS ACCESSION NUMBER

=>

L2 ANSWER 12 OF 12 REGISTRY COPYRIGHT 2006 ACS on STN
RN 52-21-1 REGISTRY
ED Entered STN: 16 Nov 1984
CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Pregna-1,4-diene-3,20-dione, 11β,17,21-trihydroxy-, 21-acetate (6CI, 7CI, 8CI)
OTHER NAMES:
CN 11β,17α,21-Trihydroxypregna-1,4-diene-3,20-dione 21-acetate
CN 21-(Acetoxy)-11β,17α-dihydroxypregna-1,4-diene-3,20-dione
CN 21-Acetoxy-11β,17-dihydroxypregna-1,4-diene-3,20-dione
CN Ak-Tate
CN Cormalone
CN Cortipred
CN Deltilen
CN Econopred
CN Falcon
CN Falcon (steroid)
CN Hydroprednisone acetate
CN Inflanefran
CN Inflanefran Forte
CN Meticortelone acetate
CN Meticotelone acetate
CN Nisolone
CN NSC 10966
CN Pred Mild
CN Pred-Forte
CN Predalone 50
CN Prediacortin
CN Predicort
CN Prednelan N
CN Prednidoren
CN Prednisolone 21-acetate
CN **Prednisolone acetate**
CN Prenema
CN Supercortyl
FS STEREOSEARCH
MF C23 H30 O6
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IMSCOSEARCH, IMSPATENTS, IPA, MEDLINE, MRCK*, MSDS-OHS, PROMT, PS, RTECS*, SPECINFO, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

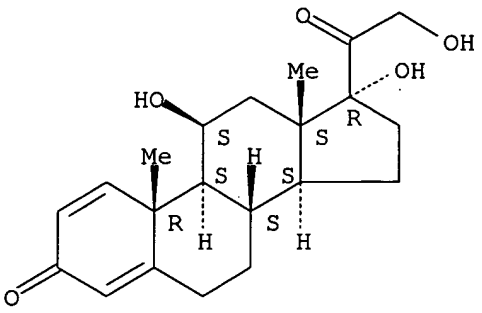
778 REFERENCES IN FILE CA (1907 TO DATE)
7 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
779 REFERENCES IN FILE CAPLUS (1907 TO DATE)
45 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=>

L1 ANSWER 309 OF 310 REGISTRY COPYRIGHT 2006 ACS on STN
RN 50-24-8 REGISTRY
ED Entered STN: 16 Nov 1984
CN Pregna-1,4-diene-3,20-dione, 11,17,21-trihydroxy-, (11β)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Δ1-Cortisol
CN Δ1-Dehydrocortisol
CN Δ1-Dehydrohydrocortisone
CN Δ1-Hydrocortisone
CN 1,2-Dehydrohydrocortisone
CN 1,4-Pregnadiene-11β,17α,21-triol-3,20-dione
CN 1,4-Pregnadiene-3,20-dione-11β,17α,21-triol
CN 1-Dehydrohydrocortisone
CN 11β,17,21-Trihydroxypregna-1,4-diene-3,20-dione
CN 11β,17α,21-Trihydroxypregna-1,4-diene-3,20-dione
CN Co-Hydeltra
CN Codelcortone
CN Cortalone
CN Decaprednil
CN Decortin H
CN Delcortol
CN Delta F
CN Delta-Cortef
CN Delta-Ef-Cortelan
CN Delta-stab
CN Deltacortenol
CN Deltacortril
CN Deltacortril Enteric
CN Deltahydrocortisone
CN Deltasolone
CN Deltisilone
CN Di-Adreson F
CN Dicortol
CN Donisolone
CN Eazolin D
CN Fernisolone
CN Flamasone
CN Hostacortin H
CN Hydeltra
CN Hydeltrone
CN Hydrodeltalone
CN Hydrodeltisone
CN Hydroretrocortin
CN Hydroretrocortine
CN Klismacort
CN Metacortandralone
CN Meti-Derm
CN Meticortelone
CN NSC 9120
CN NSC 9900
CN Panafcortelone
CN Paracortol
CN Precortalon
CN Precortancyl
CN Precortilon
CN **Prednisolone**
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY
FS STEREOSEARCH
DR 8056-11-9, 58201-11-9
MF C21 H28 O5

CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IMSCOSEARCH, IMSPATENTS, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, PROMT, PS, RTECS*, SCISEARCH, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



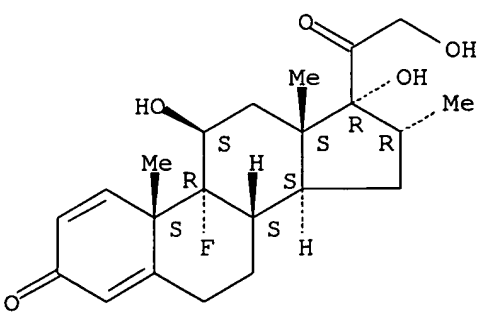
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8958 REFERENCES IN FILE CA (1907 TO DATE)
123 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
8967 REFERENCES IN FILE CAPLUS (1907 TO DATE)
106 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L1 ANSWER 310 OF 310 REGISTRY COPYRIGHT 2006 ACS on STN
RN 50-02-2 REGISTRY
ED Entered STN: 16 Nov 1984
CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,17,21-trihydroxy-16-methyl-, (11β,16α)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1-Dehydro-16α-methyl-9α-fluorohydrocortisone
CN 16α-Methyl-9α-fluoro-Δ1-hydrocortisone
CN 16α-Methyl-9α-fluoro-1,4-pregnadiene-11β,17α,21-triol-3,20-dione
CN 16α-Methyl-9α-fluoro-11β,17α,21-trihydroxypregna-1,4-diene-3,20-dione
CN **16α-Methyl-9α-fluoroprednisolone**
CN 9-Fluoro-11β,17,21-trihydroxy-16α-methylpregna-1,4-diene-3,20-dione
CN 9α-Fluoro-11β,17α,21-trihydroxy-16α-methyl-1,4-pregnadiene-3,20-dione
CN 9α-Fluoro-16α-methyl-1,4-pregnadiene-11β,17α,21-triol-3,20-dione
CN 9α-Fluoro-16α-methyl-11β,17,21-trihydroxypregna-1,4-diene-3,20-dione
CN **9α-Fluoro-16α-methylprednisolone**
CN Adexone
CN Aeroseb-Dex
CN Aphtasolon
CN Aphthasolone
CN Azium
CN Calonat
CN Corsone

CN Cortisumman
CN Decacort
CN Decaderm
CN Decadron
CN Decadron A
CN Decalix
CN Decasone
CN Dekacort
CN Delipos
CN Deltafluorene
CN Dergramin
CN Deronil
CN Desadrene
CN Desameton
CN Deseronil
CN Dexa-Cortidelt
CN Dexa-Mamallet
CN Dexa-Scheroson
CN Dexa-sine
CN Dexacort
CN Dexacortal
CN Dexacortin
CN Dexadeltone
CN Dexafarma
CN Dexalona
CN Dexaltin
CN Dexameth
CN Dexamethasone
CN Dexamethasone alcohol
CN Dexamonozon
CN Dexapolcort
CN Dexapos
CN Dexaprol
CN **Prednisolone F**
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY
FS STEREOSEARCH
DR 906422-84-2, 8054-59-9, 137098-19-2
MF C22 H29 F O5
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IMSCOSEARCH, IMSPATENTS, IPA, MEDLINE, MRCK*, MSDS-OHS, PHAR, PROMT, PS, RTECS*, SCISEARCH, SPECINFO, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



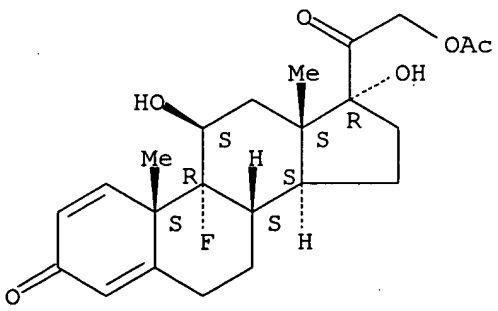
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

24661 REFERENCES IN FILE CA (1907 TO DATE)
315 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
24677 REFERENCES IN FILE CAPLUS (1907 TO DATE)
186 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> d l2 10-12

L2 ANSWER 10 OF 12 REGISTRY COPYRIGHT 2006 ACS on STN
RN 338-98-7 REGISTRY
ED Entered STN: 16 Nov 1984
CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-9-fluoro-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11β,17,21-trihydroxy-, 21-acetate (6CI, 7CI, 8CI)
OTHER NAMES:
CN 21-Acetoxy-9-fluoro-11β,17-dihydroxypregna-1,4-diene-3,20-dione
CN 9-Fluoro-11β,17,21-trihydroxypregna-1,4-diene-3,20-dione 21-acetate
CN 9-Fluoroprednisolone 21-acetate
CN **9-Fluoroprednisolone acetate**
CN 9α-Fluoro-11β,17α,21-trihydroxypregna-1,4-diene-3,20-dione 21-acetate
CN 9α-Fluoroprednisolone 21-acetate
CN **9α-Fluoroprednisolone acetate**
CN Isoflupredone acetate
CN NSC 12600
CN NSC 37977
CN Predef
CN Predef R 2X
CN U 6013
FS STEREOSEARCH
DR 26906-38-7
MF C23 H29 F O6
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CHEMLIST, CIN, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, PS, RTECS*, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

132 REFERENCES IN FILE CA (1907 TO DATE)
132 REFERENCES IN FILE CAPLUS (1907 TO DATE)
58 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

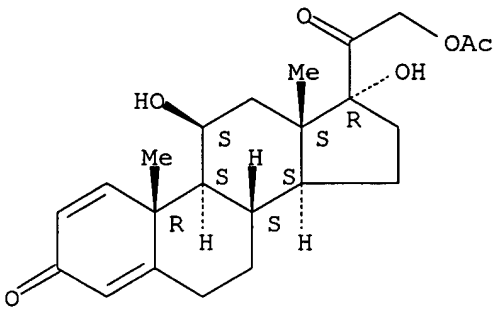
psoriasis or multiple sclerosis, are provided, comprising delivering to the site of inflammation an anti-microtubule agent (e.g. paclitaxel), or analog or derivative thereof.

IT **52-21-1, Prednisolone acetate**
RL: PAC (Pharmacological activity); BIOL (Biological study)
(anti-microtubule agents for treating multiple sclerosis and other inflammatory diseases, and pharmaceutical compns.)

RN 52-21-1 CAPLUS

CN Pregna-1,4-diene-3,20-dione, 21-(acetyloxy)-11,17-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 171 THERE ARE 171 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 29 OF 38 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2006110228 EMBASE
TITLE: Ocular drug delivery.
AUTHOR: Ghate D.; Edelhauser H.F.
CORPORATE SOURCE: Dr. H.F. Edelhauser, Emory University Eye Center, 1365B Clifton Road, Atlanta, GA 30322, United States. ophthfe@emory.edu
SOURCE: Expert Opinion on Drug Delivery, (2006) Vol. 3, No. 2, pp. 275-287. .
Refs: 116
ISSN: 1742-5247
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 012 Ophthalmology
030 Pharmacology
037 Drug Literature Index
038 Adverse Reactions Titles
039 Pharmacy
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 22 Mar 2006
Last Updated on STN: 22 Mar 2006

AB Drug delivery to the eye is hampered by anatomical factors, including the corneal epithelium, the blood-aqueous barrier and the blood-retinal barrier. This review aims to outline the major routes of ocular drug delivery, including systemic, topical, periocular and intravitreal. The pharmacokinetics, the disadvantages and the clinical relevance of these drug delivery routes have been emphasised. Recent advances in surgical techniques, therapeutic approaches and material sciences have produced exciting new therapies for ocular diseases. The role of ophthalmic drug formulation in targeting the desired ocular tissue and enhancing drug delivery by the chosen route whilst minimising side effects is also

discussed. .COPYRGT. 2006 Ashley Publications.

L15 ANSWER 30 OF 38 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 97083971 EMBASE
DOCUMENT NUMBER: 1997083971
TITLE: Charge-transfer chromatographic study of the complex formation of some steroidal drugs with carboxymethyl-γ- **cyclodextrin**.
AUTHOR: Cserhati T.; Forgacs E.
CORPORATE SOURCE: T. Cserhati, Centr. Res. Inst. for Chemistry, Hungarian Academy of Sciences, P.O. Box 17, H-1525 Budapest, Hungary
SOURCE: Analytical Biochemistry, (1997) Vol. 246, No. 2, pp. 205-210. .
Refs: 28
ISSN: 0003-2697 CODEN: ANBCA2
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 7 Apr 1997
Last Updated on STN: 7 Apr 1997

AB The interaction between 15 steroidal drugs and carboxymethyl-γ-**cyclodextrin** (CM-γ-CD) was studied by reversed-phase charge-transfer thin- layer chromatography and the relative strength of interaction was calculated. CM-γ-CD formed inclusion complexes with each compound, the complex always being less hydrophobic than the uncomplexed drug. The inclusion-forming capacity of drugs differed considerably depending on their chemical structures. The linear correlation between the hydrophobicity and specific hydrophobic surface area of anticancer drugs indicated that they can be considered as a homologous series of compounds, although their chemical structures are different. Hydrophobicity of drugs significantly influenced the strength of interaction, indicating the involvement of hydrophobic forces in the binding of drugs to CM-γ-CD. The marked influence of CM-γ-CD on the hydrophobicity of drugs suggests that this interaction may modify the biological properties (adsorption, uptake, half-life, etc.) of drug-CM-γ-CD complexes drug, resulting in modified efficacy.

L15 ANSWER 31 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:666025 CAPLUS
DOCUMENT NUMBER: 145:152690
TITLE: Method for inducing crystalline state transition in pharmaceuticals
INVENTOR(S): Nakamichi, Kouichi; Izumi, Shougo; Oka, Masaaki
PATENT ASSIGNEE(S): Nippon Shinyaju Company, Ltd., Japan
SOURCE: U.S., 18 pp., Cont.-in-part of U. S. 5,456,923.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5811547	A	19980922	US 1995-416815	19950609
CA 2147279	AA	19940428	CA 1993-2147279	19931013
WO 9408561	A1	19940428	WO 1993-JP1469	19931013
W: AU, BR, CA, FI, HU, JP, KR, NO, NZ, RU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9351607	A1	19940509	AU 1993-51607	19931013
EP 665009	A1	19950802	EP 1993-922625	19931013